

SEQUENCE LISTING

<110> Kenten, John
 Roberts, Steven

<120> CONTROLLING PROTEIN LEVELS IN EUKARYOTIC ORGANISMS

<130> 2757-5

<140> Unassigned

<141> 2001-06-14

<150> 09/406,781

<151> 1999-09-28

<150> 60/119,851

<151> 1999-02-12

<160> 67

<170> PatentIn Ver. 2.1

<210> 1

<211> 20

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: PEST example
 sequence

<400> 1

Met	Glu	Phe	Met	His	Ile	Ser	Pro	Pro	Glu	Pro	Glu	Ser	Glu	Glu	Glu
1				5					10					15	

Glu	Glu	His	Ser
			20

<210> 2

<211> 10

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: PEST example
 sequence

<400> 2

Met	Glu	Phe	Met	His	Glu	Ser	His	Ser	Ser
1				5					10

<210> 3

<211> 16

<212> PRT

<213> Unknown Organism

<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: PEST example
sequence

<400> 7
His Gly Phe Pro Pro Ala Val Ala Ala Gln Asp Asp Gly Thr Leu Pro
1 5 10 15
Met Ser Cys Ala Gln Glu Ser Gly Met Asp Arg His
20 25

<210> 8
<211> 28
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: PEST example
sequence

<400> 8
His Gly Phe Pro Pro Glu Val Glu Glu Gln Asp Asp Gly Ala Leu Pro
1 5 10 15
Met Ser Cys Ala Gln Glu Ser Gly Met Asp Arg His
20 25

<210> 9
<211> 28
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: PEST example
sequence

<400> 9
His Gly Phe Pro Pro Glu Val Glu Glu Gln Asp Asp Gly Thr Leu Pro
1 5 10 15
Met Ser Cys Ala Gln Glu Ser Gly Met Asp His His
20 25

<210> 10
<211> 28
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: PEST example
sequence

SECRET

Met Ser Cys Ala Gln Glu Ser Gly Met Asp Arg His
20 25

<211> 28

<213> Unknown Organism

<223> Description of Unknown Organism: PEST example
sequence

His Gly Phe Pro Pro Glu Val Glu Glu Gln Asp Val Gly Thr Leu Pro
1 5 10 15

<210> 12

<212> PRT

<213> Unknown Organism

<223> Description of Unknown Organism: PEST example
sequence

His Gly Phe Pro Pro Glu Val Glu Glu Gln Asp Ala Ser Thr Leu Pro
1 5 10 15

Val Ser Cys Ala Trp Glu Ser Gly Met Lys Arg His
20 25

<211> 26

<213> Unknown Organism

<223> Description of Unknown Organism: PEST example
sequence

Phe Pro Pro Gly Val Glu Glu Pro Asp Val Gly Pro Leu Pro Val Ser
1 5 10 15

Cys Ala Trp Glu Ser Gly Met Lys Arg His

20

25

<210> 14
<211> 27
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: PEST example
sequence

<400> 14
Phe Leu Ala Glu Val Glu Glu Gln Asp Val Ala Ser Leu Pro Leu Ser
1 5 10 15
Cys Ala Cys Glu Ser Gly Ile Glu Tyr Pro Ala
20 25

<210> 15
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: consensus
sequence

<220>
<221> MOD_RES
<222> (2)..(3)
<223> any amino acid

<220>
<221> MOD_RES
<222> (10)..(12)
<223> any amino acid

<220>
<221> MOD_RES
<222> (15)
<223> any amino acid

<220>
<221> MOD_RES
<222> (19)
<223> any amino acid

<220>
<221> MOD_RES
<222> (23)..(24)
<223> any amino acid

<220>
<221> MOD_RES
<222> (25)

PEST SEQUENCE

Cys Ala Xaa Glu Ser Gly Xaa Xaa Xaa Xaa
 20 25

<210> 17
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: consensus
 sequence

<220>
 <221> MOD_RES
 <222> (3)..(4)
 <223> any amino acid

<220>
 <221> MOD_RES
 <222> (8)
 <223> any amino acid

<220>
 <221> MOD_RES
 <222> (9)..(10)
 <223> optional amino acid

<220>
 <221> MOD_RES
 <222> (12)..(14)
 <223> any amino acid

<220>
 <221> MOD_RES
 <222> (16)..(17)
 <223> any amino acid

<220>
 <221> MOD_RES
 <222> (26)..(28)
 <223> any amino acid

<400> 17
 His Gly Xaa Xaa Pro Glu Val Xaa Xaa Xaa Asp Xaa Xaa Xaa Leu Xaa
 1 5 10 15

Xaa Ser Cys Ala Gln Glu Ser Gly Met Xaa Xaa Xaa
 20 25

<210> 18
 <211> 9
 <212> PRT
 <213> Unknown Organism

TEOTFSDTQSDSD

sequence

<400> 26

Arg Ala Ala Leu Gly Glu Ile Gly Asn
1 5

<210> 27

<211> 9

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: D box example
sequence

<400> 27

Arg Ala Val Leu Gly Glu Ile Gly Asn
1 5

<210> 28

<211> 9

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: D box example
sequence

<400> 28

Arg Ser Ala Phe Gly Asp Ile Thr Asn
1 5

<210> 29

<211> 9

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: D box example
sequence

<400> 29

Arg Ser Ile Leu Gly Val Ile Gln Ser
1 5

<210> 30

<211> 9

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: D box example
sequence

[illegible]

<223> Description of Unknown Organism: D box example
sequence

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<210> 35

<212> PRT

<220>

<400> 35

<210> 36

<212> PRT

<220>

<400> 36

<210> 37

<211> 9

<212> PRT

<220>

<400> 37

<210> 38

<211> 9

<212> PRT

<220>

<400> 38

Arg Arg Thr Leu Lys Val Ile Gln Pro
1 5

<210> 39
<211> 9
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: D box general
structure

<220>
<221> MOD_RES
<222> (2)
<223> Ala or Thr

<220>
<221> MOD_RES
<222> (3)
<223> amino acid present more than %50 of the time

<220>
<221> MOD_RES
<222> (6)
<223> any amino acid

<220>
<221> MOD_RES
<222> (7)
<223> Ile or Val

<220>
<221> MOD_RES
<222> (8)
<223> Gly or Thr

<220>
<221> MOD_RES
<222> (9)
<223> amino acid present more than %50 of the time

<400> 39
Arg Xaa Ala Leu Gly Xaa Xaa Xaa Asn
1 5

<210> 40
<211> 21
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 40

Lys Glu Phe Ala Val Pro Asn Glu Thr Ser Asp Ser Gly Phe Ile Ser
1 5 10 15

Gly Pro Gln Ser Ser
20

<210> 41

<211> 22

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 41

Lys Gly Pro Asp Glu Ala Glu Glu Ser Gln Tyr Asp Ser Gly Leu Glu
1 5 10 15

Ser Leu Arg Ser Leu Arg
20

<210> 42

<211> 20

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 42

Lys Ala Ala Asp Ala Asp Glu Trp Cys Asp Ser Gly Leu Gly Ser Leu
1 5 10 15

Gly Pro Asp Ala
20

<210> 43

<211> 21

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 43

Lys Lys Glu Arg Leu Leu Asp Asp Arg His Asp Ser Gly Leu Asp Ser
1 5 10 15

Met Lys Asp Glu Glu
20

<210> 44
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: consensus
sequence

<220>
<221> MOD_RES
<222> (2)...(11)
<223> any amino acid

<220>
<223> positions 2-11 may encompass X(8-10)

<400> 44
Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Ser Gly
1 5 10

<210> 45
<211> 12
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 45
Ser Tyr Leu Asp Ser Gly Ile His Ser Gly Ala Thr
1 5 10

<210> 46
<211> 12
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 46
Arg Ala Glu Asp Ser Gly Asn Glu Ser Glu Gly Glu
1 5 10

<210> 47
<211> 6
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: example peptide

<220>
<221> MOD_RES
<222> (3)...(4)
<223> any amino acid

<400> 47
Cys Cys Xaa Xaa Cys Cys
1 5

<210> 48
<211> 17
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: example peptide

<400> 48
Trp Glu Ala Ala Ala Arg Glu Ala Cys Cys Arg Glu Cys Cys Ala Arg
1 5 10 15

Ala

<210> 49
<211> 17
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: example peptide

<400> 49
Ala Glu Ala Ala Ala Arg Glu Ala Cys Cys Arg Glu Cys Cys Ala Arg
1 5 10 15

Ala

<210> 50
<211> 22
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 50
Lys Lys Glu Arg Leu Leu Asp Asp Arg His Asp Ser Gly Leu Asp Ser
1 5 10 15

<222> (8)
<223> any amino acid

<400> 53
Arg Xaa Xaa Leu Gly Xaa Ile Xaa Asn
1 5

<210> 54
<211> 10
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 54
Arg His Ala Leu Asp Asp Val Ser Asn Lys
1 5 10

<210> 55
<211> 29
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: ubiquitination
recognition element

<400> 55
His Gly Phe Pro Pro Glu Val Glu Glu Gln Asp Val Gly Thr Leu Pro
1 5 10 15
Ile Ser Cys Ala Gln Glu Ser Gly Met Asp Arg His Lys
20 25

<210> 56
<211> 4
<212> PRT
<213> Unknown Organism

<220>
<223> Description of Unknown Organism: binding peptide

<400> 56
Tyr Glu Glu Ile
1

<210> 57
<211> 18
<212> PRT
<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 57

Asp Arg Glu Gly Cys Arg Arg Gly Trp Val Gly Gln Cys Lys Ala Trp
1 5 10 15

Phe Asn

<210> 58

<211> 22

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 58

Glu Thr Pro Thr Phe Thr Trp Glu Glu Ser Asn Ala Tyr Tyr Trp Gln
1 5 10 15

Pro Tyr Ala Leu Pro Leu
20

<210> 59

<211> 12

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 59

Thr Phe Val Tyr Trp Gln Pro Tyr Ala Leu Pro Leu
1 5 10

<210> 60

<211> 15

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 60

Val Ser Leu Ala Arg Arg Pro Leu Pro Pro Leu Pro Gly Gly Lys
1 5 10 15

<210> 61

<211> 17

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 61

Lys Gly Gly Gly Ala Ala Pro Pro Leu Pro Pro Arg Asn Arg Pro Arg
1 5 10 15

Leu

<210> 62

<211> 15

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 62

Ala Glu Cys His Pro Gln Gly Pro Pro Cys Ile Glu Gly Arg Lys
1 5 10 15

<210> 63

<211> 13

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 63

Gly Ala Cys Arg Arg Glu Thr Ala Trp Ala Cys Gly Ala
1 5 10

<210> 64

<211> 12

<212> PRT

<213> Unknown Organism

<220>

<223> Description of Unknown Organism: binding peptide

<400> 64

Asp Ile Thr Trp Asp Gln Leu Trp Asp Leu Met Lys
1 5 10

<210> 65

<211> 13

<212> PRT

<213> Unknown Organism

<220>

